DATASHEET
FUJITSU PRIMERGY RX100 S6 MONO SOCKET 1 U RACK SERVER

COST OPTIMIZED AND HIGHLY MODULAR MULTI USAGE RACK SERVER

The PRIMERGY RX Rack Server family is the perfect platform to form dynamic infrastructures for your business processes today and in the coming decade. You will thus benefit several times over from our recognized experience in optimized data center technology and our innovative strength in developing energy-efficient and cost/performance-optimized rack systems for universal use. PRIMERGY rack servers, built upon industry standards, focus from a functional viewpoint on core features: energy efficiency, reliability, optimized for virtualization, ease of operation and maintenance, flexibility for your future. And thus they notably meet your requirements for outstanding cost efficiency. Optimal operating costs and long-term usability comply with the IT quality required by your customers. Our responsibility goes way beyond the hardware as our tailor-made service packages mean that you can rely on the best support for your IT during its whole lifecycle.

PRIMERGY RX100 S6

Data centers are increasingly seeking platform solutions that have minimal impact on their budgets and are easy to implement and run. PRIMERGY RX100 S6 is the right answer. The RX100 S6 meets the needs of business applications with its technical developments, such as Quad-Core Intel® Xeon® processor 3400 series and the new Dual-Core Intel® Core™ i3 processor, integrated RAID 0/1/5/6 and a memory of up to 32 GB. It unites the advantages of low-cost SATA or SAS/SSD hard disk technology with a space-saving 1U chassis and a depth of less than 60 cm. Integrated network and management functions together with the latest power saving technologies make the system ideal for infrastructure solutions for customers with limited budgets.

FEATURES AND BENEFITS

MAIN FEATURES	BENEFITS
FLEXIBILITY	
■ 2x 3.5" SATA or SAS HDDs or 4x 2.5" SATA/SAS/SSD HDDs, all hot-plug with modular RAID controllers from low-entry embedded SATA RAID 0, 1; entry SAS 1.0 RAID 0, 1; newest SAS 2.0 RAID 0, 1 to performant SAS 2.0 RAID 5,6 controller	■ Highly modular platform for all purposes that can be tailored exactly to customer requirements
NEW PLATFORM	
■ Quad-Core Intel® Xeon® processor 3400 series with virtualization technology, and the new Intel® Core™ i3 processor series generation of Intel® Dual-Core CPUs with very low power consumption	■ More tasks are handled in less time. More efficient work is possible in your IT sector and less power consumption too. Quad-Core Xeon® provides significant performance/watt growth
■ Up to 32 GB of RAM - new dimensions for the mono socket server	■ Enough memory even for databases or virtualization tasks
ENERGY EFFICIENCY	
■ Low voltage Intel® Xeon® processors and new enhanced power supply with CSCI Silver certification and improved system energy features powered by iRMC S2	■ Get the best performance but save energy and protect the environment
RELIABILITY	
■ 2 x Gbit/s Ethernet LAN with TCP/IP accelerator plus switchable Service LAN (dedicated or shared)	■ Top-speed communications link via LAN as standard ensures continuity in failover mode
SERVICEABILITY	
■ Customer Self Service Module or front VGA + USB 2.0 as option	■ Better serviceability and accessability for low-entry rack environments
■ System ID card with complete system information, e.g. Model, Serial Number, MAC Adresses etc.	■ Have all the systems important informations handy in a second

TECHNICAL DETAILS

PRIMERGY RX100 S6		
Housing type	Rack	Rack
Hard disk architecture	3.5" SAS/SATA	2.5" SAS/SATA
Power supply	Standard	Standard
MAINBOARD		
Mainboard type	D 2863	
Chipset	Intel® 3420	
Processor quantity and type	1 x Intel® Core™ i3 processor / Intel® Celeron® processor / Intel® Pentium® Dual-Core processor / Intel® Xeon® processor 3400 series	
PROCESSOR	Intel® Celeron® processor G1101 (2C, 2.26 GHz, TLC: 2 MB, Turbo: No, 1066 MHz, 73 W)	
	Intel® Core™ i3-540 processor (2C/4T, 3.06 GHz, TLC: 4 MB, Turbo: No, 1333 MHz, 73 W)	
	Intel® Core™ i3-550 processor (2C/4T, 3.20 GHz, TLC: 4 MB, Turbo: No, 1333 MHz, 73 W)	
	Intel® Pentium® processor G6950 (2C, 2.80 GHz, TLC: 3 MB, Turbo: No, 1066 MHz, 73 W)	
	Intel® Xeon® processor L3406 (2C/4T, 2.26 GHz, TLC: 4 MB, Turbo: 2/2, 1066 MHz, 30 W)	
	Intel® Xeon® processor L3426 (4C/8T, 1.86 GHz, TLC: 8 MB, Turbo: 2/2/9/10, 1333 MHz, 45 W)	
	Intel® Xeon® processor X3430 (4C/4T, 2.40 GHz, TLC: 8 MB, Turbo: 1/1/2/3, 1333 MHz, 95 W)	
	Intel® Xeon® processor X3450 (4C/8T, 2.66 GHz, TLC: 8 MB, Turbo: 1/1/4/4, 1333 MHz, 95 W)	
	Intel® Xeon® processor X3470 (4C/8T, 2.93 GHz, TLC: 8 MB, Turbo: 2/2/4/5, 1333 MHz, 95 W)	
	Intel® Xeon® processor X3480 (4C/8T, 3.06 GHz, TLC: 8 MB, Turbo: 2/2/4/5, 1333 MHz, 95 W)	
Memory slots	4 (2 banks with 2 DIMMs each)	
Memory slot type	DIMM (DDR3)	
Memory capacity (min. - max.)	1 GB - 32 GB	
Memory protection	Advanced ECC	
Memory notes	Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.	
MEMORY MODULES	1 GB (1 module(s) 1 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM	
	2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM	
	4 GB (1 module(s) 4 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500, DIMM	
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1333 MHz, PC3-10600, DIMM	
	8 GB (1 module(s) 8 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500, DIMM	
Memory modules notes	Unbuffered / Registered	
INTERFACES		
USB ports	8 x (2x (+1x optional) front, 4x back, 1x internal planned for VMWare)	
Graphics (15-pin)	1 x VGA (15-pin)	
Serial connection	1 x serial RS-232-C, usable for iRMC or system or shared	
LAN / Ethernet (RJ-45)	2 x Gbit/s Ethernet	
Service LAN (RJ45)	1 x dedicated service LAN port for iRMC S2 (10/100 Mbit/s) Service LAN traffic can be switched to shared onboard Gbit LAN port	
ONBOARD OR INTEGRATED CONTROLLER		
RAID Controller	Integrated RAID 0/1 or RAID 5/6 controller for SAS base units (option, occupies one PCIe slot). See under Components RAID controller	

ONBOARD OR INTEGRATED CONTROLLER		
SATA Controller	Intel® 3420 Ibex Peak PCH Platform Control Hub, 1 port used for accessible drive 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux;	
LAN Controller	Intel® 82574 + Intel® 82578 onboard, 2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration), PXE-Boot via LAN from PXE server, iSCSI Boot (also diskless) via onboard LAN	
Remote Management Controller	Integrated Remote Management Controller (iRMC S2, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible	
Trusted Platform Module (TPM)	optional TPM	
ONBOARD OR INTEGRATED CONTROLLER (BASE UNIT SPECIFIC)		
RAID Controller	4 port SATA with RAID 0/1for HDDs	4 port SATA with RAID 0/1for HDDs
SATA Controller	4-port SATA 3GB with RAID 0, 1	4-port SATA 3Gb with RAID 0, 1
SATA Controller type notes	for hot-plug SATA hard disks	for hot-plug SATA hard disks
SLOTS		
PCI-Express 2.0 x4 (mech. x8)	1 x (for Modular RAID only)	
PCI-Express 2.0 x8	2 x low profile (one of these can be used as standard short, 175mm)	
DRIVE BAYS		
Accessible drive bays	1 x 5.25/0.5-inch for CD-RW/DVD 1 x 3.5/0.5-inch for ServerView Local Service Panel or front VGA + USB 2.0	
DRIVE BAYS (BASE UNIT SPECIFIC)		
Hard disk bays	2 x 3.5-inch hot-plug SAS/SATA	4 x 2.5-inch hot-plug SAS/SATA
OPERATING PANEL		
Operating buttons	On/off switch NMI button	
Status LEDs	System status (amber / yellow) Identification (blue) Hard disks access (green) Power (amber / green) At system rear side: System status (amber / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow)	
Service display	Optional: ServerView Local Service Panel (LSP)	
BIOS		
BIOS features	ROM based setup utility Recovery BIOS BIOS settings save and restore Local BIOS update from USB device Online update tools for main Windows and Linux versions Local and remote update via ServerView Update Manager SMBIOS V2.4 Remote PXE boot support Remote iSCSI boot support	
Certified or supported operating systems	Microsoft® Windows Server® 2008 R2 (containing Hyper-V) Microsoft® Windows Server® 2008 Microsoft® Windows Server® 2003 Novell SUSE Linux Enterprise Server Red Hat Enterprise Linux VMware vSphere 4.1	
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=a9e600b9-e4cb-4f48-aa41-632f69058421	
Operating system notes	VMware ESX hints: - SATA RAID is not supported - Storing virtual machines locally requires a SAS RAID Controller - one of the two onboard GbE ports is supported Supported of other Linux derivatives on demand	

SERVER MANAGEMENT	
Standard	ASR&R Automatic Server Recovery and Restart PDA Prefailure Detection and Anaylsis
Option	ServerView Integration for Tivoli TEC®, Tivoli NetView, HP NNM and HP Operations Manager iRMC S2 Advanced Pack
Server Management notes	Regarding Operating System dependencies for ServerView Suite Software Products see dedicated Product Data sheets.

DIMENSIONS / WEIGHT	
Rack (W x D x H)	482.6 mm (Bezel) / 431mm (Body) x 557 x 42.5 mm
Mounting Depth Rack	702 mm
Height Unit Rack	1 U
Mounting Cable depth rack	200 mm cable depth
Weight	up to 14 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit as option

ENVIRONMENTAL	
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	w/o PCIe cards 27.6 dB(A) (idle)/27.6 dB(A) (op.) / w/ PCIe cards 35.8 dB(A) (idle)/40.7 dB(A) (op.)
Sound power (LWAd; 1B = 10dB)	System w/o PCIe cards 4.4 B (idle)/4.3 B (operating) / w/ PCIe cards 5.2 B (idle)/ 5.7 B (operating)
Operating ambient temperature	15 - 35°C
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation locations)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe

ELECTRICAL VALUES	
Power supply configuration	1x standard power supply
Standard power supply output	350 W
Rated voltage range	100 - 127 V / 200 - 240 V
Rated frequency range	47 - 63 Hz
Rated current max.	6 A
Active power (max. configuration)	288 W
Apparent power (max. configuration)	293 VA
Heat emission	1036.8 kJ/h (982.7 BTU/h)

ENERGY STAR ® 1.0 CERTIFIED CONFIGURATIONS

The following products use less energy and reduce greenhouse gas emissions by meeting the strict Energy Star guidelines.

PRIMERGY RX100 S6 E-StarFam1 (Dual-Core CPUs)
PRIMERGY RX100 S6 E-StarFam2 (Quad-Core CPUs)

http://ts.fujitsu.com/products/standard_servers/e_efficient.html

COMPLIANCE	
Germany	GS
Europe	CE Class A *
USA/Canada	CSAc/us ULc/us FCC Class A
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment)
Japan	VCCI
China	CCC
Australia/New Zealand	C-Tick
Taiwan	BSMI

COMPLIANCE	
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request. * Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

COMPONENTS

HARD DISK DRIVES	SSD SATA, 3 Gb/s, 64 GB, SLC, hot-plug, 2.5-inch, enterprise
	SSD SATA, 3 Gb/s, 32 GB, SLC, hot-plug, 2.5-inch, enterprise
	HDD SATA, 3 Gb/s, 750 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 3 Gb/s, 500 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 3 Gb/s, 500 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
	HDD SATA, 3 Gb/s, 320 GB, 5400 rpm, hot-plug, 2.5-inch, economic
	HDD SATA, 3 Gb/s, 250 GB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 3 Gb/s, 160 GB, 7200 rpm, hot-plug, 3.5-inch, economic
	HDD SATA, 3 Gb/s, 160 GB, 7200 rpm, hot-plug, 2.5-inch, business critical
	HDD SATA, 3 Gb/s, 160 GB, 5400 rpm, hot-plug, 2.5-inch, economic
	HDD SATA, 3 Gb/s, 2 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 3 Gb/s, 1 TB, 7200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 600 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 450 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 146 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 146 GB, 10000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 73 GB, 15000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 3 Gb/s, 146 GB, 15000 rpm, hot-plug, 3.5-inch, enterprise
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. Accessible capacity may vary, also depending on used software Mix of SAS and SATA HDD is possible but requires separate RAID sets and BC SATA drives
OPTICAL DRIVES	Blu-ray Disc™ Combo Drive, (2x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
	DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
SCSI / SAS CONTROLLER	SCSI Ctrl. 320 MB 1x int /1x ext
	SAS Ctrl. 3 Gb 4 ports int. / 4 ports ext.
RAID CONTROLLER	RAID 5/6 Ctrl., HDD SAS 6 Gb, LSI , 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI SAS2108)
	Integrated RAID 5/6 Ctrl., HDD SAS 6 Gb, Fujitsu , 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI SAS2108)
	Integrated RAID 0/1 Ctrl., SAS/SATA 6 Gb, Fujitsu , 8 ports int. RAID level: 0, 1, 10, no BBU support (based on LSI SAS2008)
	Integrated RAID 0/1 Ctrl., SAS/SATA 3 Gb, 4 ports int. RAID level: 0, 1, 1E, no BBU support , for internal SAS tapes (based on LSI 1064e)

LAN CONTROLLER	Converged Network Adapter 2 x 10 Gb Emulex OCe10102
	Ethernet Ctrl. 1 x 1 Gb Intel® Gigabit CT Desktop Adapter
	Ethernet Ctrl. 1 x 1 Gb Intel® PRO/1000 PF Server Adapter
	Ethernet Ctrl. 1 x 1 Gb Intel® PRO/1000 PT Server Adapter
	Ethernet Ctrl. 2 x 10 Gb Intel® Ethernet Server Adapter X520-DA2
	Ethernet Ctrl. 2 x 1 Gb Fujitsu Eth Ctrl 2x1Gbit PCIe x4 D2735 Cu
	Ethernet Ctrl. 2 x 1 Gb Intel® PRO/1000 PT Dual Port Server Adapter
	Ethernet Ctrl. 4 x 1 Gb Fujitsu Eth Ctrl 4x1Gbit PCIe x4 D2745 Cu
	Ethernet Ctrl. 4 x 1 Gb Intel® PRO/1000 PT Quad Port Server Adapter
RACK INFRASTRUCTURE	Cable Arm 1U for PRIMECENTER- and 3rd-party racks
	Rackmount kit full extraction (760mm), tool less mounting
	Rackmount kit partly extraction (524mm), tool less mounting

WARRANTY	
Standard Warranty	1 year
Service level	On-site Service (depending on country)
MAINTENANCE AND SUPPORT SERVICES - THE PERFECT EXTENSION	
Recommended Service	7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

FUJITSU PLATFORM SOLUTIONS

In addition to Fujitsu PRIMERGY RX100 S6, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures
With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

MORE INFORMATION

Learn more about Fujitsu PRIMERGY RX100 S6, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. http://ts.fujitsu.com/Primergy

FUJITSU GREEN POLICY INNOVATION

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT.
Please find further information at http://www.fujitsu.com/global/about/environment/

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CONTACT

FUJITSU LIMITED
Mies-van-der-Rohe-Straße 8
80807 München
Germany
Website: www.ts.fujitsu.com
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